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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,472

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8253

7590
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EXAMINER

PALO, FRANCIS T

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,472	Applicant(s) AHM, POUL HENRIK	
	Examiner Francis T. Palo	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 2,6 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.

Therefore, the **“Z-shaped” incision** (which is not readily apparent in the figure-6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The **abstract** of the disclosure is objected to because “the carrier” recited in the last sentence should be changed to “the granulated carrier” (so as not to be confused with the “carrier strip” recited in the second line of the abstract).

Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 1-14 are objected to because of the following informalities: The reference elements or symbols in the claims bound by parenthesis should be deleted; that is, their utility being satisfied and that they do not serve to further limit the claim(s). Appropriate correction is required.

Claims 1-12 are objected to because of the following informalities: In the claims the use of the semicolon after “characterized” is utilized inconsistently; it is recommended that the semicolon be deleted altogether or utilized consistently and further placed after the recitation of “that” in the claims. That is, “characterized in that;”.

Claim-2 is objected to because of the following informalities:

In the first line “characterize” should be changed to “characterized”.

Further, all instances of “characterise” or “characterised” should be changed to “characterize or characterized”. Appropriate correction is required.

Claim-3 is objected to because of the following informalities: The reference symbol “(v)” should be deleted, so as not to be confused with an incision shape.

Claim-11 is objected to because of the following informalities: “not shown” should be deleted from the claim, as the language does not serve to further limit the second carrier strip. Further, the parent claim recites ‘at least one carrier strip’; the first recitation of ‘carrier strip’ in claim-11 should be changed to “at least one carrier strip’.

Additionally, the first recitation of “an auxiliary layer” should be changed to ‘**the** auxiliary layer’.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim-6 recites the limitation "the bicomponent fibers" in line-2. There is insufficient antecedent basis for this limitation in the claim. Should claim-6 depend from claim-2 (which recites; ‘bicomponent fiber is made of polylactide’)?

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Claims 3, 4, 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the limitation "the incision". There is insufficient antecedent basis for this limitation in the parent claim as the limitation has been introduced in the parent claim as a product-by-process limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7-10, 12 and 18 are rejected under 35 U.S.C. 102(b),
as being anticipated by **Ahm** (US 6,701,664).

Regarding **claim-1**:

The contribution to the art(s) of the instant invention appears to be the improved retention of the granulated carrier, granulated additives, adjuvant and seed(s) in a core portion of a seed tape; specifically, a coherent, open-network core portion including locally adhered fibers of thermoplastic materials.

Both the instant application and the conflicting '**664 patent** claim a seed tape of successively arranged germinating units, each unit having a mixture of granulated carrier and additives kept together in core portions ('664; claims 1 and 2).

As to the core portion including '*locally adhered fibers of one or more thermoplastic materials*' as claimed; **Ahm '664** discloses a carrier material of plastic fibers for encasing the SAP-grains, seeds, additives and carrier ('664; claim-2).

Ahm further discloses '*threads of SAP-material can be woven into the carrier material*' ('664; claim-5).

It is submitted that the carrier material of plastic fibers as recited in the conflicting '664 patent is readable thereon the 'thermoplastic materials' as broadly recited in instant claim-1; that is, 'plastic fibers' as recited in the conflicting '664 claim-2 is considered to be encompassed by or synonymous with 'thermoplastic materials' as broadly claimed.

Further, the additional teaching of weaving threads of SAP material with the plastic fibers of the carrier material is submitted as readable on, 'bicomponent fibers' as characteristic of thermoplastic materials as again broadly claimed; that is, the combination of plastic fibers and SAP fibers is readable thereon the bicomponent fibers as claimed.

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As to the concluding product-by-process limitation, 'seed or seeds (7) is/are placed in an incision'; The determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process.

That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985).

A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

Specifically, the conflicting '664 claim-2 recites, '*the SAP-material, including the SAP-grains and also the seeds, the additives and the carrier are encased in a plate-shaped carrier material*'. Alternatively, the instant claim could be amended to recite the core portion having an incision for receiving seed, to distinguish over the prior art.

Regarding **claims 7, 8, 9, 12 and 18**:

The discussion above regarding claim-1 is relied upon.

The claims are considered to be product-by-process claims dispersed among apparatus claims, and are given no patentable distinction as the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process.

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That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process.

In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985).

Ahm '664 teaches a seed tape of successively arranged germinating units as claimed, each unit having a mixture of 'deposited' (col.-3, line-6) granulated carrier and additives kept together in core portions ('664; claims 1 and 2). The product of the instant claims 7-9, 12 and 18, even if made by a different 'deposited' process as taught by Ahm '664, is unpatentable as it appears to be the same as broadly claimed.

Regarding **claim-10**:

The discussion above regarding claim-1 is relied upon.

Ahm teaches microencapsulation of several substances, some of which are listed as a carrier (silica) as claimed.

Claim Rejections - 35 USC § 103

Claims 3, 4, 13 and 14 are rejected under 35 U.S.C. 103(a), as being unpatentable over **Ahm '664** as applied to claim-1 above, and further in view of **Weber** (US 526,512) 1894.

Regarding **claims 3, 4, 13 and 14**:

The discussion above regarding claim-1 is relied upon.

In consideration of the 35 U.S.C. 112 rejection above (lack of antecedent basis); Weber teaches seed pockets or holes in a carrier strip (A) at page-1, line-66 thereabout, and further teaches perforations or seed pockets may be formed in the mat (A) by any suitable means, such as by pressing, stamping or any other suitable means (page-1, line-89 therefrom). This teaching is taken to encompass placing seeds in an incision as claimed.

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made, to have provided Ahm '664 with incisions as recited in the listed claims, for receiving seeds as taught by Weber; as where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing KSR v. Teleflex, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)).

Accordingly, applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results;

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absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a).

Ex Parte Smith, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing KSR, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

Claims 5, 11 15 and 16 are rejected under 35 U.S.C. 103(a),
as being unpatentable over **Ahm '664** as applied to claim-1 above,
and further in view of **Onodera** (US 6,460,473) 2002.

Regarding **claims 5, 11, 15 and 16**:

The discussion above regarding claim-1 is relied upon.

Ahm '664 teaches two paper layers in the *Technical Field* and in the introduction in the *Background Art* that; "The term paper layer is here to be construed not only as a layer of paper; this layer can be made of a multitude of materials." Ahm is not specific as to the carrier strip and/or auxiliary layer being made of a thermoplastic material as claimed.

Onodera '473 teaches a seed tapes having biodegradable support members of thermosetting resins and *thermoplastic* resins among others (col.-4, line-10 therefrom).

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It would have been obvious to one of ordinary skill in the art at the time the instant invention was made, to have provided Ahm '664 with a thermoplastic material for the carrier as claimed, as Ahm '664 teaches the carrier can be made of a multitude of materials as discussed above, and Onodera '473 teaches an alternate biodegradable carrier material, wherein biodegradability is critical to both Ahm and Onodera; as where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)).

Accordingly, applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396).

Concluding, Ahm '664 provides the motivation for a thermoplastic carrier strip as discussed above and Onodera '473 teaches functionally equivalent biodegradable carrier materials (instant claim-5);

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as to claims 5, 11, 15 and 16, Ahm as modified, is capable of the material weight range claimed as a condition of the thickness of the PLA material, which is governed by the thickness of the seed and additives which the tape must house for germination.

Allowable Subject Matter

Claims 2, 6 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims; and in consideration of the 35 U.S.C. 112 rejections and claim objections discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis T. Palo whose telephone number is 571-272-6907. The examiner can normally be reached on M-Tu.,Th.-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on 571-272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Francis T. Palo/
Primary Examiner
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